

LAND LIMITATIONS

The purpose of this element is to locate areas in Fayette County, which are not suitable for solid waste facilities in terms of the environment or land use and zoning restrictions. Environmental concerns would include such things as floodplains, wetlands, groundwater recharge areas, steep slopes, water supply watersheds and unstable areas which are susceptible to seismic disturbances. Land use and zoning restrictions would refer to heavily developed areas, National Historic Sites, airports and jurisdictional boundaries (See Maps in Appendix C.).

GEOGRAPHY

Fayette County is located within the Georgia Piedmont Province of the Southern Piedmont Region. Within the Piedmont, Fayette County is in the Greenville Slope District. This district is characterized by rolling topography decreasing in elevation from 1,000 feet in the northeast to 600 feet in the southwest.

Fayette County is underlain by rock formation germane to the Piedmont Province. These rock types consist of gneiss, schist and weathered granite. Depth to bedrock in Fayette County can generally range from 32 to 60 inches. There are four major soil categories present in Fayette County; Cartecay-Wehadkee, Cecil-Applying, Gwinnett-Davidson and Pacolet-Ashlar-Gwinnett.

Fayette County is divided into three major watersheds: Flat Creek/Line Creek Drainage Basin, Whitewater Creek Drainage Basin and Flint River Drainage Basin. All streams in Fayette County drain into the Flint River and eventually the Gulf of Mexico.

SOILS

There are four major soil categories present in Fayette County; Cartecay-Wahadkee, Cecil-Applying, Gwinnett-Davidson and Pacolet-Ashlar-Gwinnett. Poorly suited soils in Fayette County can occur in the Caartecay-Wahadkee soil category. These are the areas indicated as 1. on the Soils Map (Map 1.). Slopes of 25 percent or greater do not exist in Fayette County. More detailed soil information is contained in the U.S. Department of Agriculture Soil Conservation Services Soil Survey of Clayton, Fayette and Henry Counties.

FLOODPLAINS

A floodplain is any normally dry land area that is susceptible to being inundated by waters of a 100-year flood. Fayette County uses and recognizes the areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA).

Approximately eleven percent of Fayette County is affected floodplain boundaries as delineated by FEMA. For general purposes, those areas indicated as 1. and 4. on the Soils map (Map 1.) would contain the majority of the floodplains in Fayette County. No solid waste handling facility should be located so as to restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain or result in a washout of solid waste. Fayette County regulations were adopted to meet the eligibility

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requirements of the National Flood Insurance Program.

WETLANDS

Wetlands are defined as areas that are inundated or saturated by surface or groundwater at a frequency and duration to support, and in normal circumstances to support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Significant wetland areas exist in Fayette County, especially along Whitewater Creek and the Flint River. The USGS Fish and Wildlife maps indicate the different grades of wetlands in Fayette County. For general purposes, those areas indicated as 1. and 4. on the Soils Map (Map 1.) would contain the majority of the wetlands in Fayette County. No solid waste handling facility should be located in a wetland unless no alternative sites or methods are available and the use of such wetlands complies with all applicable state and federal regulations.

WATER SUPPLY WATERSHEDS

Water supply watersheds are defined as the area or region that is drained by a body of water which is used for a municipal water supply. Fayette County is divided into three major watersheds: Flat Creek/Line Creek Drainage, Whitewater Creek Drainage Basin and Flint River Drainage Basin. Georgia DNR classifies Line Creek and Whitewater Creek as small (less than 100 square miles) watersheds. The Flint River is within a large (greater than 100 square miles) watershed. Fayette County currently withdraws water from Line Creek, Flat Creek (Lake Kedron & Lake Peachtree), Horton and Woolsey Creek (Lake Horton), the Flint River and a future intake on Line Creek (Lake McIntosh) (See Map 2.)

No solid waste handling facility should be located in the 100 foot buffer on each side of perennial streams seven miles upstream from a water supply intake or reservoir (and in small watersheds beyond the seven miles a 50 foot buffer). No solid waste handling facility impervious surface should be located in the 150 foot setback on each side of perennial streams seven miles upstream from a water supply intake or reservoir (and in small watersheds beyond the seven miles a 75 foot setback). For small watersheds (less than 100 square miles) new municipal solid waste landfills must have synthetic liners and leachate collection systems. No solid waste handling facility should be located in the 150-foot buffer surrounding water supply reservoirs. To be located within two miles of a surface water intake for a public drinking water source no new municipal solid waste landfills must have engineering modifications such as liners and leachate collection systems and groundwater monitoring systems.

GROUNDWATER RECHARGE AREAS

The Georgia Department of Natural Resources defines recharge as the process by which precipitation infiltrates soil and rock to add to the volume of water stored in pores and other openings within them. Stores of groundwater are referred to as aquifers. Areas, which contain thick soils, or saparolite, and slopes of less than eight percent have the

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potential of being significant, recharge areas.

A map put out by the Georgia DNR locates areas with thick soils that could be significant groundwater recharge areas. The map indicates thick soils exist in the northern portion of the county in the Tyrone area and in the southern portion of the county in the Brooks area (Map 3.). To be located within two miles of a groundwater recharge area, all new municipal solid waste landfills must have synthetic liners and leachate collection systems.

FAULT AND SEISMIC ZONES

According to information from ARC no major fault or seismic areas exist in Fayette County.

LAND USE/ZONING RESTRICTIONS

Brooks: Given the Town's present Land Use Plan and wellhead protection ordinance there leaves very little room to consider a solid waste disposal site in Brooks. Due to the aforementioned factors, Brooks will seek to work with other local governments in the possibility of developing a regional solid waste disposal facility.

Fayette County(Unincorporated): Solid waste handling facilities are only allowed as a Conditional Use in the M-2 Zoning District in unincorporated Fayette County. The M-2 Zoning District is classified as heavy industrial. A large area zoned M-2 exists along Roberts Road between S.R. 85 and S.R. 314. This area contains a closed BFI landfill and several auto salvage facilities (Map 4.). The 1994 Fayette County Land Use Plan designates this area as heavy industrial.

Fayetteville: Zoning / Land Use: Zoning restrictions are probably the most limiting of all factors in siting a waste handling facility. The City of Fayetteville's Zoning Ordinance restricts landfills to the M-2 Heavy Manufacturing district. Landfills are further restricted by their proximity to groundwater recharge areas, historic sites, wetlands, and floodplains.

Transfer stations, composting sites, recycling centers, and other solid waste handling facilities are not specifically mentioned in the Zoning Ordinance. When it would be desirable to locate those types of facilities within the City, the Planning Commission has authority to designate zoning districts where such use would be allowed. In locating a solid waste handling facility, the requirements of the Land Use Plan and impact to the surrounding area should be carefully studied.

It is anticipated that the City will continue to contract for disposal outside the jurisdiction. Therefore, it is not likely that a sanitary landfill will be developed within the City.

The M-2 zoning district is illustrated on Map 5.. Existing and future land uses are illustrated on Maps 6. and 7. respectively.

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Peachtree City: Peachtree City has several factors limiting the locations of solid waste handling/disposal facilities. Zoning restrictions reduce the effective usable area to 4.5 square miles (2,850 ac.) for all handling facilities. Of this amount, restrictions based upon airport limitations, county line setbacks, and watershed considerations, reduce this further to .62 square miles (402 ac.), which equates to 2.5% of the entire area within the city limits for MSW landfills (Maps 8. – 13.). Therefore, it is highly unlikely that a MSW landfill would be located within Peachtree City. However, several locations described lend themselves to development as handling facilities. More than likely, one or more of these sites could be used for recycling, composting, or material separation & recovery facilities. One such site is currently under consideration for relocation of the City's Recycling Center.

Tyrone: The Town of Tyrone's eastern and western boundaries are critical watersheds and drinking water supplies to Fayette County and the City of Newnan. At both the north and south end of the Town are major operating quarries. Much of the prevailing soils strata are influenced by bedrock. Hence, little available area remains for establishing a landfill within the Town. Also, the region has been identified as a major groundwater recharge area that would prohibit landfill installations.

NATIONAL HISTORIC SITES

A study done for the Fayette County Historical Society indicates that Starrs Mill, located in unincorporated Fayette County, and the Fayette County Courthouse, located in the City of Fayetteville, are on the National Historic Registry (Map 4.). No solid waste handling facility should be located in or adjoining as to negatively impact a district or site on the National Register.

AIRPORTS

Fayette County has one public airport, Falcon Field, in Peachtree City and eight small private landing fields. Falcon Field accommodates turbojet aircraft; the smaller landing fields only accommodate piston-type aircraft. Georgia EPD's Rules for Solid Waste Management require sanitary landfills not be located within 10,000 feet of any airport runway end used by turbojet aircraft or within 5,000 feet of any airport runway end used by only piston-type aircraft (Map 4.).

PROXIMITY TO ADJOINING COUNTY BOUNDARIES

No new or existing solid waste disposal facility should be expanded into the area one-half mile from a county boundary unless the adjoining county approves. Map 4. indicates the approximate one-half mile area surrounding the border of Fayette County.

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HABITAT OF RARE, THREATENED AND ENDANGERED PLANTS, ANIMALS AND BIOLOGICAL COMMUNITIES

No solid waste handling facility should be located in such a way as to result in the destruction of the habitat of rare, threatened and endangered plants, animals and biological communities as identified in the Georgia Natural Resources. The inventory indicates no endangered plants, animals, or biological communities within Fayette County.

URBAN AND BUILT-UP AREAS

Map 9. depicts urban and built-up areas in Fayette County. These areas would include the incorporated municipalities and those areas in the unincorporated county, which contains the bulk of the one-acre single-family residential subdivision development.